

Mineral Industry Surveys

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LEAD IN OCTOBER 2004

Domestic mine production, based on the net quantity of lead recovered from concentrate, was 36,200 metric tons (t) in October, according to the U.S. Geological Survey. This was a decrease of 2% percent compared with that of September. Mine production for the first 10 months of 2004 was 357,000 t, down by 6% compared with that of the same period in 2003. Secondary refinery production (96,800 t) increased by 2% in October, and reported consumption (114,000 t) was unchanged from that of the previous month. Secondary production for the first 10 months of 2004 was down by 1% compared with production in the first 10 months of 2003, and reported consumption rose by about 1% for the same period.

According to the Platts Metals Week published quotations, the average North American producer price increased to 60.60 cents per pound in October, a 2.7% increase above the September price. The average London Metal Exchange Ltd. (LME) cash price decreased to \$931.91 per metric ton, a 0.3% decrease from the September price. These are significantly higher prices compared with October 2003 averages, up about 38% and 59%, respectively. The LME October prices ranged from a low of \$873.00 per metric ton (October 14) to a high of \$1,018.00 per metric ton (October 23); in October, the lead prices were below \$900 for 10 trading days, while for 11 trading days the price was above \$900.00. For the month of October, LME lead stocks dropped by 3,875 t to 49,200 t.

In the United States, supply of lead was somewhat limited during the month of October, with demand for lead-acid batteries strong but not exceptional over the previous couple of months. In Europe, demand for lead was strong, but again, not exceptional, with neither producers nor consumers experiencing supply problems. In China, power supply problems caused some smelters to cut back production, resulting in a slowing of the year-on-year growth of refined lead from 29% in January 2004 to 8% in September 2004. Chinese domestic markets remained relatively stable during October (CRU International Ltd., 2004).

CRU reported at the end of October that negotiations for 2005 between lead suppliers and consumers in the United States were

further along than in Europe. Indications were that premiums would be about 5 cents to 6 cents per pound, and one major battery producer was reported to have completed a multi-year deal. European negotiators were still trying to evaluate and predict the availability of lead for importation during 2005 to fill an expected deficit. A significant factor favoring the consumers in Europe was improving production at several primary and one secondary plant (CRU International Ltd., 2004).

A Chinese battery company official advocated the enforcement of State Environmental Protection Administration regulations and described the current recycling practices as contaminating air, water, and soil, and wasting both lead and sulfur. An incomplete survey shows at least 500,000 t of scrap lead is available per annum; a large portion of what is being recycled goes through numerous small illegal recycling factories. Environmentalists and battery producers alike are advocating achieving a recycling rate of 95%, no sulfuric acid drained into sewage systems, no smelting of complete batteries (shells and acid), enclosed smelting equipment, improved purifying equipment for chemical and gas waste, minimum capacity of 5,000 t per year, and closure of small operations unable to meet these criteria (Antaike, 2004; CRU International Ltd., 2004).

The National Defense Stockpile aggregated cash disposal (sale) of lead in October, under the monthly Basic Ordering Agreement DLA-Lead-005, was 3,500 t (3,858 short tons) for an approximate value of \$3.8 million (Defense National Stockpile Center, 2004).

References Cited

- Antaike, 2004, Industrial News—Recycling of waste lead-acid batteries urgently required: Antaike, China Metal Market – Lead & Zinc, Tin Monthly, No. 96, November, p. 9 and 10.
- CRU International Ltd., 2004, CRU Monitor—Lead: CRU International Ltd., November, 12 p.
- Defense National Stockpile Center, 2004, Stockpile announces lead sales for October 2004: Fort Belvoir, VA, U. S. Defense National Stockpile Center news release, November 5, 1 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2003		2004		
	Year	January - October	September	October	January - October
Production:					
Mine (recoverable)	449,000	381,000	36,900	36,200	357,000 ^r
Primary refinery	245,000	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,140,000	939,000 ^r	92,600	94,600	931,000
Estimated	--	9,480 ^r	935	955	9,400
Recovered from copper-base scrap ^c	11,400	12,500	1,250	1,250	12,500
Total secondary	1,150,000	961,000 ^r	94,800	96,800	953,000
Stocks, end of period:					
Primary refineries	NA	NA	NA	NA	NA
Secondary smelters and consumers	107,000	78,700 ^r	66,000	67,200	67,200
Imports for consumption:					
Ore and concentrate	6	3	--	NA	3 ²
Refined metal	175,000	150,000	14,600	NA	140,000 ²
Consumption:					
Reported	1,390,000	1,130,000 ^r	114,000 ^r	114,000	1,140,000
Undistributed ^c	--	34,900 ^r	3,510 ^r	3,520	35,300
Total	1,390,000	1,160,000 ^r	117,000 ^r	117,000	1,180,000
Exports:					
Ore and concentrate	253,000	192,000	25,300	NA	207,000 ²
Bullion	593	585	5	NA	69 ²
Wrought and unwrought lead	123,000	81,500	6,120	NA	64,700 ²
TEL/TML preparations, based on lead compounds	517	463	18	NA	583 ²
Exports (gross weight): Scrap	92,800	72,400	3,850	NA	41,300 ²
Platts Metals Week North American producer price (cents per pound)	43.76	43.67	58.98	60.60	54.03

^cEstimated. ^rRevised. NA Not available. -- Zero.

¹Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

²Includes data for January - September only; October data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price cents/lb	LME		Sterling exchange rate dollars/£
		\$/metric ton	£/metric ton	
2003:				
October	43.98	586.82	349.47	1.679164
December	44.30	691.69	394.89	1.751605
Year	43.76	514.62	313.88	1.634750
2004:				
August	57.30	920.77	505.85	1.820255
September	58.98	934.92	521.23	1.793671
October	60.60	931.91	515.39	1.808175

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks September 30, 2004	Net receipts	Consumption	Stocks October 31, 2004
Battery-lead	12,200	96,500	96,700	12,000
Soft lead	W	W	W	W
Drosses and residues	1,850	1,470	1,460	1,870
Other ²	1,260	1,940	1,960	1,240
Total	15,300	99,900	100,000	15,100
Percent change from preceding month	XX	+0.2	-0.6	-1.0

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN OCTOBER 2004¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	70,000	--	--
Remelt lead	W	W	W
Antimonial lead	24,100	W	W
Other ²	W	W	--
Total lead-base	94,600	41	353

W Withheld to avoid disclosing company proprietary data; included in "Total."

-- Zero.

¹Data are rounded to no more than three significant digits.

²Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES¹

(Metric tons, lead content)

Use	2003		2004		
	Year	January - October ^r	September	October	January - October
Metal products:					
Ammunition, shot and bullets	48,800	44,900	3,950	4,220	44,200
Brass and bronze, billet and ingots	2,810	2,810	194	194	2,770
Cable covering, power and communication and calking lead, building construction	4,790	4,370	67	113	3,530
Casting metals	31,700	27,800	2,780	2,790	27,800
Sheet lead, pipes, traps and other extruded products	25,900	19,900	1,980	2,220	19,900
Solder	6,310	1,340	95	109	1,280
Storage batteries, including oxides	1,170,000	942,000	97,200 ^r	97,100	973,000
Terne metal, type metal, and other metal products ²	23,200	12,700	1,260	1,260	12,900
Total metal products	1,310,000	1,060,000	108,000 ^r	108,000	1,090,000
Other oxides and miscellaneous	78,300	73,500	6,010	5,670	56,100
Total reported	1,390,000	1,130,000	114,000 ^r	114,000	1,140,000
Undistributed ^e	--	34,900	3,510 ^r	3,520	35,300
Grand total	1,390,000	1,160,000	117,000 ^r	117,000	1,180,000

^eEstimated. ^rRevised. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

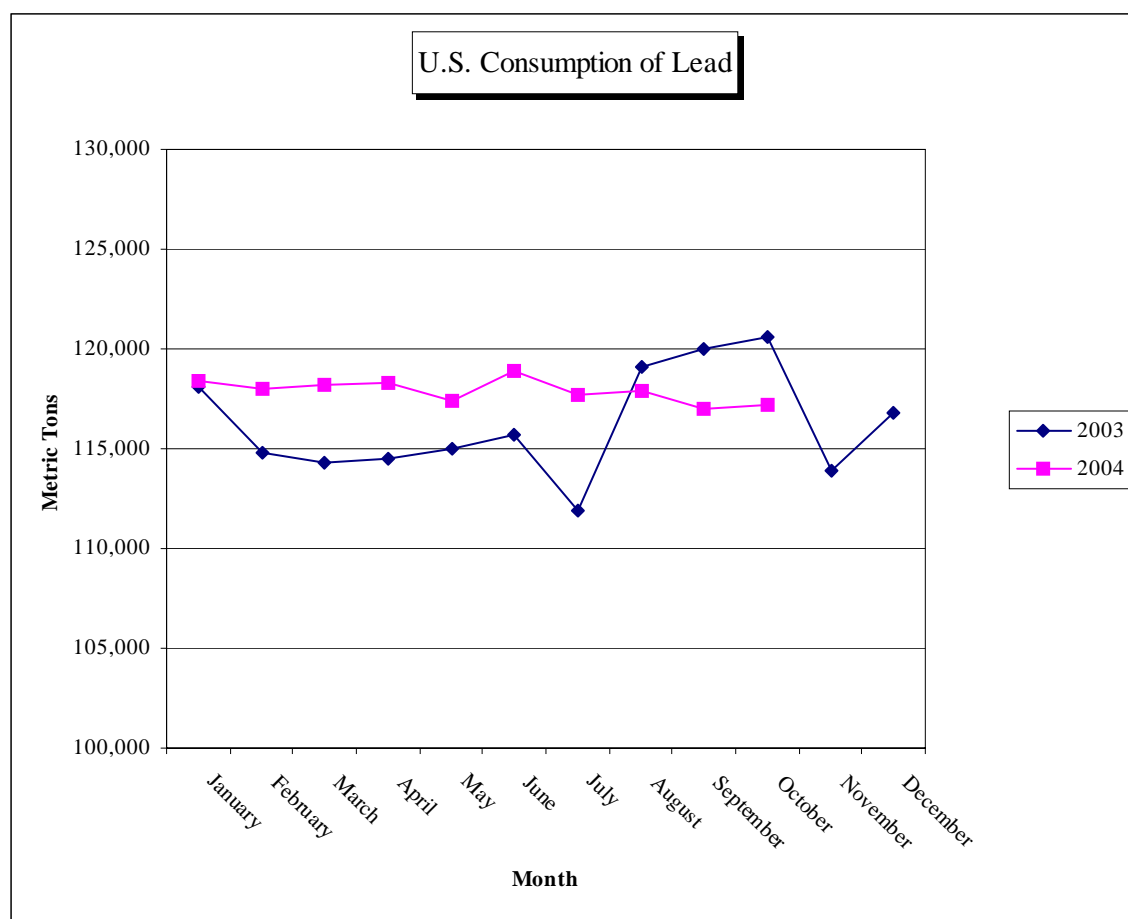


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS,
RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks September 30, 2004	Net receipts	Consumption	Stocks October 31, 2004
Soft lead	34,200	64,100	62,900	35,500
Antimonial lead	15,900 ^r	31,500	31,400	16,100
Lead alloys	W	19,100	19,100	W
Copper-base scrap	W	56	62	W
Total	65,800 ^r	115,000	113,000	67,200

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Total."

¹Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS¹

(Metric tons)

	2003		2004		
	Year	September	August	September	January - September
Lead content:					
Ore and concentrates	253,000	43,600	53,800	25,300	207,000
Bullion	593	9	5	5	69
Materials excluding scrap	123,000	5,960	5,170	6,120	64,700
TEL/TML preparations, based on lead compounds	517	17	11	18	583
Total	377,000	49,600	59,000	31,500	273,000
Gross weight: Scrap	92,800	9,280	4,280	3,850	41,300

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS OF LEAD BY TYPE OF MATERIAL AND BY COUNTRY OF ORIGIN¹

(Metric tons, lead content)

Type/Country	General imports					Imports for consumption				
	2003		2004			2003		2004		
	Year	January - September	August	September	January - September	Year	January - September	August	September	January - September
Base bullion:										
Argentina	5	--	--	--	--	5	--	--	--	--
Germany	1	--	--	--	--	1	--	--	--	--
Mexico	--	3 ^r	--	--	3	--	3 ^r	--	--	3
Total	6	3 ^r	--	--	3	6	3 ^r	--	--	3
Pigs and bars:										
Australia	10,100	10,100	--	--	--	107	--	931	1,010	12,200
Canada	167,000	131,000	12,400	12,000	114,000	167,000	131,000	12,400	12,000	114,000
China	1	1	--	--	2	1	1	--	--	2
Germany	--	--	29	--	281	--	--	29	--	281
Mexico	8,270	6,970	225	281	8,000	8,270	6,970	225	281	8,000
Other	259	127	932	1,300	5,430	259	127	932	1,300	5,560
Total	186,000	149,000	13,600	13,600	128,000	175,000	138,000	14,500	14,600	140,000
Grand total	186,000	149,000	13,600	13,600	128,000	175,000	138,000	14,500	14,600	140,000

^rRevised. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.